

c

Notice of Allowability	Application No.	Applicant(s)	
	10/627,109	IKEGAMI ET AL.	
	Examiner	Art Unit	
	Filip Zec	3744	

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Arguments received on July 15, 2004.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 25 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|---|

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The prior art does not anticipate nor render obvious the combination set forth in the independent claims, and specifically does not show the a refrigeration system comprising an ejector, having a nozzle arrangement, wherein when a system heat load is equal or greater than a predetermined value, the degree of throttle opening of the nozzle arrangement, or the refrigerant flow rate control valve, is controlled in such a manner that a coefficient of performance coincides with a first target value; and when a system heat load is less than the predetermined value, the degree of throttle opening of the nozzle arrangement is controlled in such a manner that a flow rate of refrigerant, which passes through the nozzle arrangement, coincides with a second target value.
2. U.S. Patent 6,438,993 to Takeuchi et al. claims a nozzle, constructed by a nozzle group having a plurality of nozzle parts, the system further comprising a valve for controlling a flow amount of refrigerant flowing into the nozzle group, however it does not teach the throttle opening to be controlled, when the heat load is equal or greater than a predetermined value; in a manner that a coefficient of performance coincides with a first target value; and when the heat load is less than the predetermined value, the degree of throttle opening of the nozzle arrangement is controlled in such a manner that a flow rate of refrigerant, which passes through the nozzle arrangement, coincides with a second target value. U.S. Patent 6,698,221 to You teaches a refrigerating system comprising an ejector connected to the by-pass pipes for ejecting the part of the refrigerant fed from evaporator back to the compressor based on the venturi principle, said ejector retrieves energy lost when the pressure necessary to make refrigerant flowing is changed from high pressure to low pressure and reuses the energy as a power source

Art Unit: 3744

for increasing the pressure again, thereby reducing the amount of energy used in the refrigerating system and improving the performance of the system. It does not teach the throttle opening to be controlled, when the heat load is equal or greater than a predetermined value, in a manner that a coefficient of performance coincides with a first target value; and when the heat load is less than the predetermined value, the degree of throttle opening of the nozzle arrangement is controlled in such a manner that a flow rate of refrigerant, which passes through the nozzle arrangement, coincides with a second target value.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

- The claims have been renumbered as follows (old claim # -> new claim #): 1 -> 1; 2 -> 5; 3 -> 8; 4 -> 2; 5 -> 3; 6 -> 4; 7 -> 6; 8 -> 7; 9 -> 9; 10 -> 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 3744

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Filip Zec whose telephone number is (571) 272-4815. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Filip Zec
Examiner
Art Unit 3744


CHERYL TYLER
SUPERVISORY PATENT EXAMINER

FZ